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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/645,374 | 08/21/2003 | Michael P. Gahagan | 2985R-02 | 7438 |

7590

04/29/2004

Teresan W. Gilbert
The Lubrizol Corporation
Patent Dept.-Mail Drop 022B
29400 Lakeland Boulevard
Wickliffe, OH 44092-2298

EXAMINER

MCAVOY, ELLEN M

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/645,374 | Applicant(s) GAHAGAN, MICHAEL P. | |
| | Examiner Ellen M McAvoy | Art Unit 1764 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003 (preliminary amend.).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-20 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-20 and 25-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/21/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-20 and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al (5,605,880) in view of LeSuer (3,197,405).

Arai et al ["Arai"] disclose a lubricating oil composition suitable for use in internal combustion engines comprising (A) a lubricating base oil, (B) an alkyldiphenylamine or a phenyl- α -naphthyl amine antioxidant, and (C) 50-2,000 ppm by weight, preferably 100-1,000 ppm by weight, in terms of the amount of molybdenum of at least one type of compound selected from oxymolybdenum sulfide dithiocarbamate and oxymolybdenum sulfide organophosphorodithioates. See column 2, lines 5-67. The composition may also comprise ash-free detergent dispersants such as succinimide-type compounds, succinic amide-type compounds, benzyl amine-type compounds and boron derivatives thereof. See column 5, lines 24-40. The composition may also comprise a wear-preventing agent such as metal salts of thiophosphoric acid, phosphoric esters and esters of phosphorus acid. See column 5, lines 41-46. Polysulfurized olefins are not required to be present in the composition. Applicant's open-ended claim language "comprising" allows for the addition of other additives to the composition such as the antioxidant component of Arai. Thus, the examiner is of the position that Arai clearly meets the limitations of independent claim 25, the only independent claim presented. Applicant's

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invention may differ in some dependent claims from the composition disclosed in Arai by adding specific anti-wear agents to the composition. However, LeSuer teaches several of the claimed anti-wear agents such as phosphorus- and nitrogen-containing anti-wear additives for lubricating oil compositions. The compounds are prepared by reacting a hydroxy-substituted tri-ester of a phosphorothioic acid (which is prepared by reacting a phosphorodithioic acid with an epoxide or a glycol) with an inorganic phosphorus reagent selected from phosphorus acids, phosphorus oxides and phosphorus halides, to form an acidic intermediate and then neutralizing the intermediate with an amine. See column 1, lines 26-62. The examiner is of the position that LeSuer meets the limitations of the phosphoric acid ester component (B) of dependent claims 10 to 14. Thus, the examiner is of the position that it would have been obvious to have added any known anti-wear agent to the composition of Arai if their known imparted properties were so desired.

Claim Rejections - 35 USC § 103

Claims 10, 15, 19, 20 and 25-30 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al (5,672,572).

Arai et al ["Arai"] disclose lubricating oil compositions suitable for use in internal combustion engines and in automatic transmissions and having a total base number of 2 to 13 which comprises a base oil of lubricating viscosity and, as additives, (A) a zinc dialkyldithiophosphate antiwear agent, (B) a calcium sulfonate and calcium salicylate detergent,

and (C) 50 to 2,000 ppm in terms of molybdenum of sulfurized oxymolybdenum dithiocarbamate. See column 2, lines 13-39. Arai also allows for the addition of ashless detergent dispersants. See column 4, lines 39-48. Polysulfurized olefins are not required to be present in the composition and applicant's open-ended claim language "comprising" allows for the addition of other additives to the composition such as the detergent component of Arai. Thus, the examiner is of the position that Arai clearly meets the limitations of the composition of independent claim 25.

Conclusion

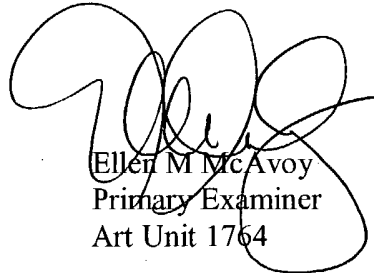
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen M. McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
April 27, 2004